



PATENTS  
ORIGINALLY FILED

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: GEORGE E. BITTNER  
Application No.: 09/931,607  
Art Unit: 3748  
Filed: August 16, 2001  
For: APPARATUS AND METHOD  
FOR A HEAT ENGINE

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Services on the date shown below with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231

Marie J. Parr  
Marie J. Parr

Date: June 21, 2002

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Commissioner for Patents  
Washington, DC 20231  
Attn: Examiner Hoang M. Nguyen

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TECHNOLOGY CENTER R3700

### RESPONSE TO OFFICE ACTION

In response to the Office Action mailed May 21, 2002, please amend the application as follows:

#### **In the Specification:**

Please replace page 6. In line 11, page 6, please delete the phrase "A channel 21" and insert the phrase --A channel 41--. No new matter has been added to the case.

#### **In the Claims:**

Applicant notes that claims 40-79 have been renumbered to claims 39-78 because there was no claim 39 in the original application.

Please amend claims 1 and 45 as follows:

1. (Amended) A heat engine in combination:

a) a plurality of heating side expansion chambers and cooling side expansion chambers, positioned on opposite sides of an axis[,] wherein said cooling side expansion chambers lag said heating side expansion chambers, for expanding and contracting fluids;